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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/619,358	07/14/2003	Hao-Song Kong		6331
22199 7590 12/27/2007 MITSUBISHI ELECTRIC RESEARCH LABORATORIES, INC. 201 BROADWAY 8TH FLOOR CAMBRIDGE, MA 02139				
			EXAMINER HOANG, THAI D	
			ART UNIT 2616	PAPER NUMBER
			MAIL DATE 12/27/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/619,358	Applicant(s) KONG ET AL.	
	Examiner Thai D. Hoang	Art Unit 2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 August 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-6 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As for claim 1, the specification does not disclose or suggest "*a real-time feedback information*" as recited in lines 3 and 6 of claim 1.

As for claim 5, the specification does not disclose or suggest "*the redundant packet is transmitted before an original copy*" as recited in claim 5.

Claims 2-6 are rejected because they depend on rejected claim 1.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 4 recite the limitation "the selected packet" in line 1; Claims 5 and 6 recite the limitation "the redundant packet" in line 1. There are insufficient antecedent basis for this limitations in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being unpatentable by Itoh et al., US Patent Application Publication No. 2004/0114576 A1.

Regarding claim 1, as best understood, Itoh discloses a transmission and reception video/audio method, comprising the steps of (see [0004]-[0007])

receiving in a sender subsystem from a receiver subsystem real-time ([0030]) feedback information on conditions of the network while transmitting the packets by the sender subsystem (a transmission terminal receives request feedback from a reception terminal);

determining a probability of packet loss based on the real-time feedback in the sender subsystem (the transmission terminal determines a packet lost rate);

generating redundant packets for selected packets of the bit stream in the sender subsystem if the probability of packet loss is greater than a predetermined threshold (the transmission terminal receives values of a packet loss rate from a reception terminal and controls a within a predetermined threshold value, and retransmitting the lost packet).

Regarding claim 2, Itoh discloses the conditions include packet loss rate, available bandwidth, and round-trip latency (the transmission terminal receives values

of a packet loss rate, a delay time and the like as feedback information from a reception terminal and controls a transmission rate, thereby controlling the packet loss rate, the delay time; [0004].)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

(I) Claims 3-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh as shown above in view of Klemets, US Patent No. 5,918,002.

Regarding claim 3, Itoh does not disclose the selected packet is a header of packet of an I-frame. However, Klemets shows in his invention the selected packet is a header packet of an I-frame (Col. 12 line 8-10).

Regarding claim 4, Itoh does not disclose the selected packet is a header packet of an P-frame. However, Klemets shows the selected packet is a header packet of a P-frame (Col. 12 line 8-12).

(ii) Claims 5-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Itoh as shown above in view of Jang US PG-PUB 2004/0027991

As for claim 5, Itoh does not show retransmit in which the redundant packet is transmitted before an original copy of the corresponding packet. However, Jang shows in which the redundant packet is transmitted before an original copy of the corresponding packet (Figure 6, shows, packet 2 and 4 are loss and retransmitted

before the original corresponding packet 7). It would have been obvious to one of ordinary skill in the art at the time of the invention was made to modify the retransmission of Itoh with the packet ordering of Jang in order to efficiently receiving the packet at the receiver in sequential order.

As for claim 6, Itoh does not show a position of the original packet in the frame, and the redundant packet is transmitted after an original copy of the corresponding packet. However, Jang shows a position of the original packet in the frame (figure 6, ARQ interval), and the redundant packet is transmitted after an original copy of the corresponding packet (Figure 6, shows, packet 2 and 4 are loss and retransmitted after the original corresponding packet 3). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the retransmission of Klemets with the packet ordering of Jang in order to efficiently receiving the packet at the receiver in sequential order.

Response to Arguments

Applicant's arguments with respect to claims 1-6 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Apostolopoulos, US PAT. No. 7,103,669 B2, "Video communication method and system employing multiple state encoding and path diversity."

Anandakumar et al, US PAT No. 6,804,244 B1, "Integrated circuits for packet communications."

Rhee, US PAT No. 6,421,387 B1, "Methods and systems for forward error correction based loss recovery for interactive video transmission."

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thai D. Hoang whose telephone number is (571) 272-3184. The examiner can normally be reached on Monday-Friday 10:00am-6:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/619,358
Art Unit: 2616

Page 7

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Thai Hoang/


CHI PHAM
SUPERVISORY PATENT EXAMINER

12/26/07